=> fil casreact FILE 'CASREACT' ENTERED AT 08:44:03 ON 12 JUL 2006 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT: 1840 - 9 Jul 2006 VOL 145 ISS 2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

****************** CASREACT now has more than 10 million reactions ******************

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d sta que 12 L1STR

RRT 5 0 Cy--- N---- C--- O

PRO

NODE ATTRIBUTES: CONNECT IS E2 RC AT DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

140 SEA FILE=CASREACT SSS FUL L1 (1518 REACTIONS)

100.0% DONE 1090410 VERIFIED 1518 HIT RXNS (4 INCOMP) 140 DOCS SEARCH TIME: 00.00.20

=> d bib abs fhit retable tot

L48 ANSWER 1 OF 2 CASREACT COPYRIGHT 2006 ACS on STN AN141:332212 CASREACT ΤI Preparation of aminopyrimidinyl-substituted thiazoles useful as inhibitors

```
of protein kinases
```

IN Farmer, Luc J.; Harrington, Edmund Martin; Salituro, Francesco G.; Wang,

PA Vertex Pharmaceuticals Incorporated, USA

PCT Int. Appl., 76 pp. SO

CODEN: PIXXD2

DTPatent

English LA

GI

FAN.	CNT	1																	
	PA'	TENT	NO.				DATE								DATE				
PI					Α	A2 20041014				WO 2004-US9061 20					2004	20040325			
	WO	2004					2004												
		W:					ΑT,												
							CZ,												
							ΗU,												
							LU,												
							PH,												
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
		RW:					LS,												
							RU,												
			ES,	FI,	FR,	GB,	GR,	HU,	ΙĖ,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	
					BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	G₩,	ML,	MR,	NE,	SN,	
	TD, TG																		
	AU 2004225965					2004	1014		A	U 20	04-2	2596:	5	2004	0325				
		2523					2004												
	US 2004235834												2004						
	EΡ	1610								EP 2004-758287				20040325					
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	ΗU,	PL,	SK	
PRAI		2003																	
	WO	2004	-US9	061	20	0403	25												
os	S MARPAT 141:332212																		

$$R^{2}$$
 R^{1}
 R^{2}
 R^{3}
 R^{4}
 R^{3}

Title compds. I [R1-2 = halo, CN, NO2, etc.; Ar1 = aryl, etc.; R3-4 = ZR7;AΒ Z = bond, alkylidene; R7 = halo, NO2, CN, alkoxy, etc.] are prepared General procedures are provided, e.g., [4-[2-((3,5dimethylphenyl)amino)pyrimidin-4-yl]thiazol-2-yl]methanol. Selected example compds. of the invention exhibit $\text{Ki} < 5~\mu\text{M}$ for Syk kinase. I are useful for the treatment of autoimmune disorders.

RX(1) OF 113 ...A ===> B

```
RX(1) RCT A 883967-53-1

RGT C 76-05-1 F3CCO2H

PRO B 769933-80-4

SOL 75-09-2 CH2C12

CON 1 hour, room temperature

NTE analogs similarly prepared
```

141:225319 CASREACT

AN

TI IN

L48 ANSWER 2 OF 2 CASREACT COPYRIGHT 2006 ACS on STN

Snoonian, John R.; Oliver-Shaffer, Patrica-Ann

Process for preparation of N-heteroaryl-N-aryl-amines

```
Vertex Pharmaceuticals Incorporated, USA
PA
     PCT Int. Appl., 64 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                            APPLICATION NO. DATE
                     ____
                                            WO 2004-US3933
     WO 2004072038
                                                                20040210
ΡI
                       A1
                             20040826
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
                             20040826
                                             AU 2004-212494
     AU 2004212494
                                                                20040210
                        A1
     CA 2515669
                             20040826
                                             CA 2004-2515669
                                                                20040210
                        AA
     US 2004230058
                        A1
                             20041118
                                             US 2004-775687
                                                                20040210
                                             EP 2004-709916
     EP 1603878
                        Α1
                             20051214
                                                                20040210
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                             20060419
     CN 1761653
                                           CN 2004-80007137 20040210
                      Α
     NO 2005004201
                             20051006
                                             NO 2005-4201
                                                                20050909
                        Α
```

PRAI US 2003-446641P 20030210 US 2003-474272P 20030528 WO 2004-US3933 20040210 OS MARPAT 141:225319 GI

The present invention relates to a process for producing diarylamine derivs. with general formula of Ar1-NH-Ar2 [wherein Ar1 and Ar2 = independently (un) substituted aryl or heteroaryl] or salts thereof, which comprises coupling a compound of formula Ar1-X [where X = a leaving group] with an amine of formula Ar2-NH-Y [where Y = CO2Z; Z = alkyl, PhCH2, Fmoc, etc.] in the presence of an alkali metal salt or a transition metal catalyst. For example, the compound I was prepared starting from 6-chloro-2-(4-fluorophenyl) nicotinic acid Me ester (preparation given) and N-(tert-butoxycarbonyl)-2,6-difluoroaniline.

Ι

RX(5) OF 37 ... O + R ===> S...

S

RX (5)

```
STAGE (1)
     RGT
         T 98327-87-8 Phosphine, [1,1'-binaphthalene]-2,2'-
          diylbis[diphenyl-
     CAT
          3375-31-3 Pd(OAc)2
     SOL
         108-88-3 PhMe
     CON
          SUBSTAGE(1) 2 hours, room temperature -> 50 deg C
          SUBSTAGE(2) 50 deg C -> 30 deg C
  STAGE (2)
     RCT O 745833-06-1, R 745833-17-4
     RGT U 7778-53-2 K3PO4
     CON SUBSTAGE(2) overnight, 100 deg C
  STAGE (3)
     RGT
         V 76-05-1 F3CCO2H
     SOL
         75-09-2 CH2C12
     CON SUBSTAGE(2) overnight
PRO S 745833-08-3
NTE workup
```

=> d bib abs fhit retable tot 147

```
L47
    ANSWER 1 OF 3 CASREACT COPYRIGHT 2006 ACS on STN
ΑN
     139:331783 CASREACT
ΤI
     Synthesis, spectral and magnetic studies of mononuclear and binuclear
     Mn(II), Co(II), Ni(II) and Cu(II) complexes with semicarbazone ligands
     derived from sulfonamide
ΑU
     Saleh, A. A.; Khalil, S. M. E.; Eid, M. F.; El-Ghamry, M. A.
CS
     Department of Chemistry, Faculty of Education, Ain Shams University,
     Cairo, Egypt
SO
     Journal of Coordination Chemistry (2003), 56(6), 467-480
     CODEN: JCCMBQ; ISSN: 0095-8972
PB
     Taylor & Francis Ltd.
DT
     Journal
```

LA English

AΒ Mononuclear and binuclear Mn(II), Co(II), Ni(II) and Cu(II) complexes of new semicarbazone ligands derived from sulfonamide were synthesized and characterized by elemental anal. and IR spectra. In mononuclear complexes, the semicarbazone behaves as a monoanionic terdentate or neutral terdentate ligand towards the metal ion. However, in binuclear complexes, it behaves as a monoanionic terdentate towards one of the bivalent metal ions and monoanionic bidentate ligand towards the other metal ion in the same complex. Electronic spectra and magnetic susceptibility measurements of the solid complexes indicated octahedral geometry around Mn(II), Co(II) and Ni(II) and square planar around the Cu(II) ion. These geometries were confirmed by the results obtained from thermal analyses. The antifungal properties of the ligands and their complexes were studied.

RX(44) OF 79 COMPOSED OF RX(5), RX(1), RX(7)RX (44) J + B ===> N

● cl-

●3 H₂O

N

RX (5) RCT J 41104-55-6 RGT

K 7803-57-8 N2H4-H2O

PRO A 87013-80-7

```
SOL 68-12-2 DMF
          CON SUBSTAGE(1) room temperature
              SUBSTAGE(2) 4 hours, reflux
RX (1)
          RCT A 87013-80-7, B 90-02-8
          PRO C 613221-31-1
          SOL
              68-12-2 DMF
          CON 1 hour, reflux
          NTE product depends on time of refluxing
RX (7)
         RCT C 613221-31-1
            STAGE(1)
              RGT O 1310-65-2 LiOH
              SOL
                   7732-18-5 Water, 64-17-5 EtOH
              CON 30 minutes, room temperature
            STAGE (2)
              RGT P 7773-01-5 MnCl2
              SOL 7732-18-5 Water
              CON 5 hours, room temperature
```

PRO N 613221-35-5

RETABLE

Referenced Author (RAU)	Year VOI (RPY) (RVI	•	Referenced Work (RWK)	Referenced File
=======================================	=+====+====	=+====	=+=============	+=========
Biradar, N	1971 33	2451	J Inorg Nucl Chem	CAPLUS
Cotton, F	1961 83	4175	J Am Chem Soc	İ
Dhakarey, R	1985 32	35	J Chin Chem Soc	CAPLUS
Eugenio, J	1999 18	12483	Polyhedron	CAPLUS
Hathaway, B	1970 5	1143	Coord Chem Rev	ICAPLUS
Hueso, F	1999 18		polyhedron	i
Ismail, T	12000 43	227	Egypt J Chem	ICAPLUS
Khalil, S	12000 152		J Coord Chem	CAPLUS
Kulkarni, Y	11990 67	146	J Indian Chem Soc	CAPLUS
Lever, A	1968	Ì	Inorganic Electronic	i
Nakamoto, K	[1980]	1258	Infrared and Raman S	
Probhakaran, C	1998 75	17	J Indian Chem Soc	i
Saleh, A	1990 29	2132	J Inorg Chem	CAPLUS
Satapathy, S	1970 32	2223	J Inorg Nucl Chem	CAPLUS
Satpathy, K	1986 68	1377	J Indian Chem Soc	İ
Saxena, A	1981 43	3091	J Inorg Nucl Chem	CAPLUS
Singh, A	1996 73	1339	J Indian Chem Soc	İ
Sonar, G		1677	J Indian Chem Soc	İ
West, D	1993 49	1123	Coord Chem Rev	İ

```
L47 ANSWER 2 OF 3 CASREACT COPYRIGHT 2006 ACS on STN
```

AN 139:7095 CASREACT

TI Syntheses of guanidinoglycosides with the inventive use of Mitsunobu conditions and 1,8-diazabicyclo[5.4.0]undec-7-ene

AU Lin, Peishan; Heng, Sabrina Cher Hui; Sim, Mui Mui

CS Institute of Molecular and Cell Biology, Singapore, 117609, Singapore

SO Synthesis (2003), (2), 255-261 CODEN: SYNTBF; ISSN: 0039-7881

PB Georg Thieme Verlag

DT Journal

LA English

AB A series of novel guanidinoglycosides was successfully synthesized. This

was accomplished with the use of Mitsunobu conditions as a strategy to convert the glycopyranose anomeric hydroxy group to give the corresponding substituted masked guanidines in high yields. Subsequent deprotection and coupling with Fmoc protected β -amino acid, afforded a series of N,N'-substituted-methylisothioureas. Cleavage of Fmoc followed by concomitant cyclization was achieved with a catalytic amount of DBU to give the guanidinoglycosides.

RX(32) OF 41 COMPOSED OF RX(3), RX(11), RX(6) RX(32) I + T ===> **AA**

Ι

jan delaval - 12 july 2006

AA YIELD 45%

```
RX (3)
         RCT I 535952-55-7
            STAGE(1)
               RGT L 76-05-1 F3CCO2H
               SOL 75-09-2 CH2Cl2, 100-66-3 PhOMe
               CON 15 minutes, 0 deg C
            STAGE(2)
               SOL 110-54-3 Hexane
            STAGE (3)
              SOL 67-56-1 MeOH
            STAGE (4)
              RGT M 144-55-8 NaHCO3
               CON neutralized
          PRO K 535952-59-1
RX (11)
         RCT T 270062-97-0
            STAGE(1)
              RGT V 2592-95-2 1-Benzotriazolol, W 693-13-0 i-PrN:C:NPr-i
               SOL 127-19-5 AcNMe2, 75-09-2 CH2Cl2
               CON 10 minutes, room temperature
            STAGE (2)
               RCT K 535952-59-1
               RGT X 7087-68-5 EtN(Pr-i)2
               SOL
                   75-09-2 CH2C12
              CON 24 hours, room temperature
          PRO Z 535952-62-6
          NTE stereoselective
RX (6)
          RCT
              Z 535952-62-6
          RGT
              AB 6674-22-2 DBU
          PRO
              AA 535952-67-1
          SOL
              109-99-9 THF
          CON
              1 hour, room temperature
          NTE stereoselective
RETABLE
   Referenced Author
                     |Year | VOL | PG
                                        | Referenced Work | Referenced
```

(RAU)			(RPG)		File
Baker, T	=+==== 2000		+====== 9054		+======= CAPLUS
Bu, X	-		12419	Tetrahedron Lett	CAPLUS
Cotner, E	1998	•	1737		ICAPLUS
Delaware, D	1986		1251		ICAPLUS
Dodd, D	•		1977	•	CAPLUS
Dodd, D	11998		15701		CAPLUS
Feichtinger, K		163	3804	•	•
Feichtinger, K	•	•		•	CAPLUS
- :	•	-	8432		CAPLUS
Gololobov, Y	•	37	437		CAPLUS
Hughes, D	11996		1127		CAPLUS
Kim, H	•	12	193	Synlett	1
Lemieux, R	1948	3	1337	Adv Carbohydr Chem	CAPLUS
Lin, P	2001	66	8243	J Org Chem	CAPLUS
Magri, N	1988	51	298	J Nat Prod	CAPLUS
Maurin, M	2001	45	2977	Antimicrob Agents Ch	CAPLUS
Metcalf, C	11998	39	3435		CAPLUS
Mitsunobu, O	11981	j	1		CAPLUS
Molina, P	11994		1197	Synthesis	CAPLUS
Mori, Y	11999	40	7239	Tetrahedron Lett	CAPLUS
Ouyang, X	11999	55	8295	Tetrahedron	CAPLUS
Reitz, A	11989	132	2110	J Med Chem	CAPLUS
Roush, W	11994	128	4935	Tetrahedron Lett	1
Sheppeck, J	12000	141	5329	Tetrahedron Lett	CAPLUS
Wade, J	11991	4	194		CAPLUS

- L47 ANSWER 3 OF 3 CASREACT COPYRIGHT 2006 ACS on STN
- AN 138:361747 CASREACT
- TI Synthesis and antimicrobial activity of copper-, cobalt- and nickel(II) complexes with Schiff bases
- AU Jadegoud, Y.; Ijare, Omkar B.; Mallikarjuna, N. N.; Angadi, S. D.; Mruthyunjayaswamy, B. H. M.
- CS Department of Chemistry, Gulbarga University, Gulbarga, 585 106, India
- SO Journal of the Indian Chemical Society (2002), 79(12), 921-924 CODEN: JICSAH; ISSN: 0019-4522
- PB Indian Chemical Society
- DT Journal
- LA English
- AB A few complexes of CuII, CoII and NiII were prepared by reacting their metal(II) chlorides with 3-(4'-phenylthiazole-2'-yl)-1-(2'-hydroxy-1'-iminomethylphenyl)urea and with 3-(4'-phenylthiazole-2'-yl)-1-(2',4'-dihydroxy/2'-hydroxy-5'-chloro-1'-methyliminomethylphenyl)ureas (Schiff bases) in EtOH medium. The chelates are colored solids and nonelectrolytes ML2. The IR spectra of the ligands and complexes suggest involvement of o-hydroxy group, carbonyl group, azomethine group in bonding through O and N atoms resp. The electronic spectra and magnetic data suggest the octahedral stereochem. for all the complexes in which metal(II) ion exhibits coordination number six. The ligands and complexes were tested for their antimicrobial activity.
- RX(31) OF 48 COMPOSED OF RX(14), RX(10), RX(1) RX(31) 2 Y + 2 R ===> B

AIETD 88%

RX (14) RCT Y 3673-36-7 RGT AA 302-01-2 N2H4 PRO S 519141-81-2 SOL 64-17-5 EtOH CON 5 hours, reflux RX(10) RCT R 90-02-8, S 519141-81-2 PRO A 519141-78-7 CAT 7647-01-0 HCl SOL 64-17-5 EtOH CON 8 hours, reflux RX(1) RCT A 519141-78-7 STAGE(1) RGT C 7447-39-4 CuCl2 SOL 64-17-5 EtOH CON 2 hours, reflux STAGE (2) RGT D 127-09-3 AcONa CON 3 hours, reflux

PRO B **519141-69-6**

RETABLE

Referenced Author (RAU)		(RVL)	PG (RPG)	(RWK)	Referenced File
Biradar, N Chohan, Z Deshpande, V	1971 1998 1986	•	2451 1673 2397		CAPLUS CAPLUS
Dey, K	11999		1139	Indian J Chem, Sect	į
Dilworh, I Dodson, R	•	21 67	29 2242	Coord Chem Rev J Am Chem Soc	I ICAPLUS
Dunn, T	11960			The Visible and Ultr	,
Durig, J Dutta, R		23 44	11121	• •	CAPLUS
Feggis, B	11966	4 4 	635 	J Sci Ind Res Introduction to Liga	CAPLUS
Freedman, H		183	12900	J Am Chem Soc	CAPLUS
Hiremath, A Hiremath, A	1982 1984	59 61	1017 191	J Indian Chem Soc J Indian Chem Soc	 CAPLUS
Holm, R	1966	7	83	• • • • • • • • • • • • • • • • • • • •	CAPLUS
Ibrahim, K Kato, M		32 64	361 99	Indian J Chem, Sect Chem Rev	 CAPLUS
Krishna, C	•	139	1253	J Inorg Nucl Chem	 CAPLOS
Mane, R		22	81	Indian J Chem, Sect	
Pelizzi, C Prabhakaran, C	1980 1980	I 20	1970 474	J Chem Soc, Dalton T Indian J Chem Sect A	•
Rajashekar, G	1998	10	306	Asian J Chem	İ
Rastogi, D Tahir, A		8 39	97 450	J Coord Chem Indian J Chem, Sect	
Thaker, B	•	35	483	Indian J Chem, Sect	
Tijmir, H	1983	12	1723	Polyhedron	l

=> => fil reg FILE 'REGISTRY' ENTERED AT 09:05:24 ON 12 JUL 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2006 HIGHEST RN 892124-43-5 DICTIONARY FILE UPDATES: 11 JUL 2006 HIGHEST RN 892124-43-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d que 169 L49 69304 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKALI METAL?/CT L50 583318 SEA FILE=HCAPLUS ABB=ON PLU=ON "ALKALI METAL SALTS"+OLD,NT/CT

```
L51
         635713 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                (L49 OR L50)
L52
          89263 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                TRANSITION METAL?/CT
L53
           8286 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 ("TRANSITION METALS, USES"/CT
                OR "TRANSITION METALS, USES AND MISCELLANEOUS"/CT)
L54
         669385 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                 (L51 OR L52 OR L53) AND
                (PY<=2003 OR PRY<=2003 OR AY<=2003)
L55
          14006 SEA FILE=HCAPLUS ABB=ON PLU=ON L54 AND HET?/SC,SX
L56
            155 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND ("COUPLING AGENTS"+OLD
                ,NT/CT OR "COUPLING FACTORS"/CT OR "COUPLING REACTION"+OLD,NT/C
                T)
L57
            76 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND "COUPLING REACTION
               CATALYSTS"+OLD, NT/CT
L58
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND ("COUPLING REACTION
               ENTHALPY"+OLD, NT/CT OR "COUPLING REACTION KINETICS"+OLD, NT/CT
               OR "COUPLING REACTIONS"/CT)
L59
            175 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                (L56 OR L57 OR L58)
L60
            120 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND HET?/SC
L62
                TRANSFER PLU=ON L60 1- RN:
                                                 4093 TERMS
L63
           4093 SEA FILE=REGISTRY ABB=ON PLU=ON L62
L64
               STR
Cy~N~Hy
```

1 2 3

NODE ATTRIBUTES:
CONNECT IS E2 RC AT 2
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

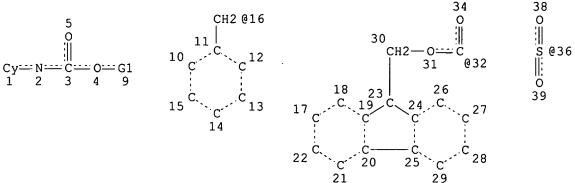
GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE

L69 616 SEA FILE=REGISTRY SUB=L63 SSS FUL L64

=> d que	174	
L49	69304	SEA FILE=HCAPLUS ABB=ON PLU=ON ALKALI METAL?/CT
L50	583318	SEA FILE=HCAPLUS ABB=ON PLU=ON "ALKALI METAL SALTS"+OLD, NT/CT
_		
		SEA FILE=HCAPLUS ABB=ON PLU=ON (L49 OR L50)
L52	89263	SEA FILE=HCAPLUS ABB=ON PLU=ON TRANSITION METAL?/CT
L53	8286	SEA FILE=HCAPLUS ABB=ON PLU=ON ("TRANSITION METALS, USES"/CT
		OR "TRANSITION METALS, USES AND MISCELLANEOUS"/CT)
L54	669385	SEA FILE=HCAPLUS ABB=ON PLU=ON (L51 OR L52 OR L53) AND
		(PY<=2003 OR PRY<=2003 OR AY<=2003)
L55	14006	SEA FILE=HCAPLUS ABB=ON PLU=ON L54 AND HET?/SC,SX
L56	155	SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND ("COUPLING AGENTS"+OLD
		,NT/CT OR "COUPLING FACTORS"/CT OR "COUPLING REACTION"+OLD,NT/C
		T)
L57	76	SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND "COUPLING REACTION
		CATALYSTS"+OLD, NT/CT
L58	3	SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND ("COUPLING REACTION
		ENTHALPY"+OLD, NT/CT OR "COUPLING REACTION KINETICS"+OLD, NT/CT
		OR "COUPLING REACTIONS"/CT)
L59	175	SEA FILE=HCAPLUS ABB=ON PLU=ON (L56 OR L57 OR L58)
L60		SEA FILE=HCAPLUS ABB=ON PLU=ON L59 AND HET?/SC
L62		TRANSFER PLU=ON L60 1- RN : 4093 TERMS

L63 4093 SEA FILE=REGISTRY ABB=ON PLU=ON L62 L66 STR



VAR G1=AK/16/32/36/CY NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

L74 30 SEA FILE=REGISTRY SUB=L63 SSS FUL L66

=> d his

L9

(FILE 'HOME' ENTERED AT 08:25:28 ON 12 JUL 2006) SET COST OFF

FILE 'CASREACT' ENTERED AT 08:25:48 ON 12 JUL 2006 ACT ZINNA775B/A

L1 STR L2 140 SEA FILE=CASREACT SS.

140 SEA FILE=CASREACT SSS FUL L1 (1518 REACTIONS)

ACT ZINNA775A/Q

L5 3 S L4 SAM SUB=L2

L6 139 S L4 FUL SUB=L2 SAV L6 ZINNA775E/A

L7 1 S L2 AND (SNOONIAN? OR OLIVER? OR SHAFFER?)/AU
L8 1 S L6 AND (SNOONIAN? OR OLIVER? OR SHAFFER?)/AU

1 S L6 AND (SNOONIAN? OR OLIVER? OR SHAFFER?)/AU
2 S L2,L6 AND VERTEX?/PA,CS

L10 2 S L7-L9

L11 106 S L2 AND (PY<=2003 OR PRY<=2003 OR AY<=2003) ACT ZINNA775C/A

ACT ZINNA//5C/

L12 (4892)SEA FILE=CASREACT ABB=ON PLU=ON ("TRANSITION METAL ALLOYS"/CT L13 (17604)SEA FILE=CASREACT ABB=ON PLU=ON (ALKALI OR TRANSITION)(L)META L14 17604 SEA FILE=CASREACT ABB=ON PLU=ON (L12 OR L13)

```
L15
           2358 S ALKALI METAL?/CT
L16
           4892 S TRANSITION METAL?/CT
L17
              3 S L11 AND L15, L16
L18
              2 S L17 NOT L10
                E COUPLING/CT
L19
              2 S E4-E8 AND L11
L20
              1 S L10 AND L17, L19
L21
              2 S L10, L20
L22
              3 S L17-L20 NOT L21
L23
            101 S L11 NOT L21, L22
     FILE 'HCAPLUS' ENTERED AT 08:35:42 ON 12 JUL 2006
                ACT ZINNA775D/A
               _____
L24 (
              1) SEA FILE=HCAPLUS ABB=ON PLU=ON US20040230058/PN OR US2004-775
L25 (
             16) SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                  ("SNOONIAN J R"/AU OR "SNOONIA
                                                  ("OLIVER SHAFFER PATRICA ANN"/
L26 (
              4) SEA FILE=HCAPLUS ABB=ON
                                         PLU=ON
L27 (
             23) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  ("OLIVER P"/AU OR "OLIVER P A"
                                                  ("OLIVER PATRICIA"/AU OR "OLIV
L28 (
             13) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  ("SHAFFER P"/AU OR "SHAFFER P
L29 (
            24) SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
L30 (
              2) SEA FILE=HCAPLUS ABB=ON
                                                  "SHAFFER PATRICIA"/AU
                                          PLU=ON
L31 (
            683) SEA FILE=HCAPLUS ABB=ON
                                         PLU=ON VERTEX?/PA,CS
L32
            759 SEA FILE=HCAPLUS ABB=ON PLU=ON (L24 OR L25 OR L26 OR L27 OR L
L33
              1 S L24 AND US20040230058/PN
                SEL RN
     FILE 'REGISTRY' ENTERED AT 08:36:31 ON 12 JUL 2006
L34
             29 S E1-E29
L35
             16 S L34 NOT NC5/ES
L36
             14 S L35 NOT C6/ES
     FILE 'HCAPLUS' ENTERED AT 08:38:28 ON 12 JUL 2006
     FILE 'CASREACT' ENTERED AT 08:38:42 ON 12 JUL 2006
L37
         159260 S L36
L38
              2 S L37 AND L21
L39
              1 S L37 AND L22
L40
              2 S L22 NOT L39
L41
             75 S L23 AND L37
     FILE 'REGISTRY' ENTERED AT 08:41:20 ON 12 JUL 2006
             11 S L36 AND (PD OR RB OR CS OR K OR NA)/ELS
L42
L43
              3 S L36 NOT L42
L44
              1 S L43 AND H5NO
     FILE 'HCAPLUS' ENTERED AT 08:42:11 ON 12 JUL 2006
     FILE 'CASREACT' ENTERED AT 08:42:24 ON 12 JUL 2006
L45
             60 S L42, L44 AND L23
L46
              5 S L21, L22 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
L47
              3 S L46 NOT L21
     FILE 'CASREACT' ENTERED AT 08:44:03 ON 12 JUL 2006
L48
              2 S L46 NOT L47
     FILE 'HCAPLUS' ENTERED AT 08:47:03 ON 12 JUL 2006
                E ALKALI METAL/CT
                E ALKALI METAL?/CT
L49
          69304 S ALKALI METAL?/CT
```

```
E ALKALI METAL/CT
                 E ALKALI METAL SALT/CT
L50
         583318 S E4+OLD, NT
L51
         635713 S L49,L50
                E TRANSITION METAL/CT
L52
          89263 S TRANSITION METAL?/CT
                E TRANSITION METALS, /CT
L53
           8286 S E18, E19
L54
         669385 S L51-L53 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
          14006 S L54 AND HET?/SC, SX
L55
                E COUPLING/CT
L56
            155 S L55 AND (E6+OLD, NT OR E14 OR E21+OLD, NT)
L57
             76 S L55 AND E58+OLD, NT
L58
              3 S L55 AND (E66+OLD, NT OR E67+OLD, NT OR E72)
            175 S L56-L58
L59
L60
            120 S L59 AND HET?/SC
             55 S L59 NOT L60
L61
     FILE 'REGISTRY' ENTERED AT 08:56:48 ON 12 JUL 2006
     FILE 'HCAPLUS' ENTERED AT 08:56:49 ON 12 JUL 2006
L62
                TRA L60 1- RN :
                                     4093 TERMS
     FILE 'REGISTRY' ENTERED AT 08:56:54 ON 12 JUL 2006
L63
           4093 SEA L62
L64
                STR
L65
             34 S L64 SAM SUB=L63
L66
                STR L4
L67
              0 S L66 SAM SUB=L63
             50 S L66
L68
L69
            616 S L64 FUL SUB=L63
                SAV L69 ZINNA775F/A
     FILE 'HCAPLUS' ENTERED AT 08:59:19 ON 12 JUL 2006
L70
              9 S L69 (L) PREP+NT/RL
L71
              5 S L70 AND L60
L72
              3 S L70 AND L42, L44
     FILE 'REGISTRY' ENTERED AT 09:01:20 ON 12 JUL 2006
L73
             50 S L66 SAM
L74
             30 S L66 FUL SUB=L63
                SAV L74 ZINNA775G/A
     FILE 'HCAPLUS' ENTERED AT 09:02:01 ON 12 JUL 2006
L75
              2 S L74 AND L70
L76
              3 S L72, L75
L77
              2 S L71 NOT L76
              1 S L70 AND VERTEX?/PA,CS
L78
              1 S L70 AND (SNOONIAN? OR OLIVER/ OR SHAFFER?)/AU
L79
L80
              1 S L78, L79
L81
              5 S L76-L80
L82
              5 S L81 AND L32, L33, L49-L61, L70-L72, L75-L81
L83
              4 S L70 NOT L82
```

FILE 'REGISTRY' ENTERED AT 09:05:24 ON 12 JUL 2006

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 09:05:40 ON 12 JUL 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Jul 2006 VOL 145 ISS 3 FILE LAST UPDATED: 11 Jul 2006 (20060711/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 182 bib abs hitrn fhitstr retable

```
L82 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN
```

AN 2004:1037107 HCAPLUS

DN 142:23304

- TI Preparation of pyrazoloquinazolines as inhibitors of protein kinases such as Aurora2 for the treatment of proliferative disorders such as cancer, Alzheimer's disease, and autoimmune diseases
- IN Traquandi, Gabriella; Brasca, Maria Gabriella; D'Alessio, Roberto; Polucci, Paolo; Roletto, Fulvia; Vulpetti, Anna; Pevarello, Paolo; Panzeri, Achille; Quartieri, Francesca; Ferguson, Ron; Vianello, Paola; Fancelli, Daniele
- PA Pharmacia Italia S.A., Italy
- SO PCT Int. Appl., 226 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

1111110111111																		
	PATENT NO.			KI	KIND DATE			APPLICATION NO.					DATE					
					-													
ΡI	WO 2004	10400	7	A.		2004	1202	1	WO 2	004-1	EP50	612		20	0040	427 <	-	
	₩:			L, AM,														
		CN,	co, c	R, CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
				M, HR,														
				S, LT														
		NO,	NZ, O	M, PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		TJ,	TM, T	N, TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH, G	M, KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		AZ,	BY, K	G, KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES, F	I, FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,		
		SI,	SK, T	R, BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,	NE,		
		SN,	TD, T	G														
	AU 2004240772			A.	A1 20041202				AU 2004-240772					20040427 <				
	CA 2526578 EP 1636236		A.A	1	2004	1202	CA 2004-2526578					20	0040	427 <				
			A.	A1 20060322			EP 2004-741483					20040427 <			-			
	R:	AT,	BE, C	H, DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
				I, RO,														
	NO 2005	00549	6	Α		2006	0214		NO 2	005-	5496			2	0051	121 <		
PRAI	US 2003	3-4726	61P	Р		2003	0522	<	_									

WO 2004-EP50612 MARPAT 142:23304 W 20040427

Ι

OS GΙ

$$\begin{array}{c|c}
N & A & O \\
RX & N & R2
\end{array}$$

$$\begin{array}{c|c}
N & & & O \\
RX & & & & \\
N & & & NR1
\end{array}$$

Pyrazoloquinazolines I or II [A = CH2, CH2CH2, CH2CMe2, CMe2CH2, CH:CH; R AΒ = H, (un)substituted amino, alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl; R1 = H, (un)substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl; R2 = (un) substituted amino, (hydroxy) amino; R1R2 = (CH2) 2NH, (CH2) 3NH; R3 = H, (un) substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocycloalkyl; RNR3 may also form a 5- or 6-membered heterocycle which may also contain a second heteroatom of N, O, or S; X = NR3, C(:O)NR3, NHC(:0)NH, O, S, SO2] such as pyrazolo[4,3-h]quinazoline III are prepared as inhibitors of protein kinases such as Aurora2 (and particularly cell cycle-dependent kinases) for the treatment of proliferative disorders such as cancer, Alzheimer's disease, viral infection, autoimmune diseases, and neurodegenerative disorders. Acid-catalyzed vinyl ether formation from 1,2-cyclohexanedione provides 2-ethoxy-2-cyclohexen-1-one; Claisen condensation with di-Et oxalate and cyclocondensation with Me hydrazine yields oxotetrahydroindazolecarboxylate IV. Dimethylaminomethylenation of IV with DMF di-tert-Bu acetal, cyclocondensation with methylisothiourea sulfate, and substitution of the methylthio group with benzylzinc bromide in the presence of tetrakis(triphenylphosphine)palladium yields III. I are active as protein kinase inhibitors and therefore as inhibitors of cellular proliferation (no data). Detailed processes for the preparation of compds. I (and intermediates prepared within) are claimed.

```
802534-91-4P 802534-99-2P 802535-27-9P
802535-57-5P 802535-81-5P 802535-83-7P
802537-13-9P 802537-15-1P 802537-24-2P
802537-25-3P 802537-26-4P 802537-27-5P
802537-28-6P 802537-29-7P 802537-30-0P
802537-31-1P 802537-32-2P 802537-33-3P
802537-34-4P 802537-35-5P 802537-36-6P
802537-37-7P 802537-38-8P 802537-39-9P
802537-92-4P 802537-93-5P 802537-94-6P
802537-96-8P 802537-98-0P 802538-79-0P
802539-63-5P 802539-65-7P 802539-70-4P
802539-81-7P.
```

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

```
preparation); THU (Therapeutic use); BIOL (Biological study);
    PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
        (drug candidate; preparation of pyrazoloquinazolines as inhibitors of
        protein kinases such as Aurora2 for the treatment of proliferative
        disorders such as cancer, Alzheimer's disease, and autoimmune diseases)
IT
    802533-98-8P 802533-99-9P 802534-06-1P
     802534-07-2P 802534-23-2P 802534-25-4P
    802534-35-6P 802534-38-9P 802534-39-0P
    802534-50-5P 802534-51-6P 802534-52-7P
    802534-53-8P 802534-54-9P 802534-55-0P
    802534-56-1P 802534-57-2P 802534-58-3P
    802534-59-4P 802534-60-7P 802534-61-8P
    802534-62-9P 802534-63-0P 802534-64-1P
    802534-65-2P 802534-66-3P 802534-67-4P
    802534-84-5P 802534-85-6P 802534-86-7P
    802534-87-8P 802534-88-9P 802534-89-0P
    802534-90-3P 802534-93-6P 802534-94-7P
    802534-95-8P 802534-96-9P 802534-98-1P
    802535-00-8P 802535-01-9P 802535-02-0P
    802535-03-1P 802535-04-2P 802535-05-3P
    802535-06-4P 802535-07-5P 802535-08-6P
    802535-09-7P 802535-10-0P 802535-11-1P
    802535-12-2P 802535-13-3P 802535-14-4P
    802535-15-5P 802535-16-6P 802535-17-7P
    802535-18-8P 802535-19-9P 802535-20-2P
    802535-21-3P 802535-22-4P 802535-23-5P
    802535-28-0P 802535-30-4P 802535-31-5P
    802535-32-6P 802535-33-7P 802535-34-8P
    802535-35-9P 802535-36-0P 802535-37-1P
    802535-38-2P 802535-39-3P 802535-40-6P
    802535-41-7P 802535-42-8P 802535-43-9P
    802535-44-0P 802535-45-1P 802535-46-2P
    802535-47-3P 802535-48-4P 802535-49-5P
    802535-50-8P 802535-51-9P 802535-53-1P
    802535-54-2P 802535-55-3P 802535-56-4P
    802535-58-6P 802535-59-7P 802535-60-0P
    802535-61-1P 802535-62-2P 802535-63-3P
    802535-64-4P 802535-65-5P 802535-66-6P
    802535-67-7P 802535-68-8P 802535-69-9P
    802535-70-2P 802535-71-3P 802535-82-6P
    802535-84-8P 802535-85-9P 802535-86-0P
    802535-87-1P 802535-88-2P 802535-89-3P
    802535-90-6P 802535-92-8P 802535-93-9P
    802535-94-0P 802535-95-1P 802535-96-2P
    802535-97-3P 802535-98-4P 802535-99-5P
    802536-00-1P 802536-01-2P 802536-02-3P
    802536-03-4P 802536-04-5P 802536-05-6P
    802536-06-7P 802536-07-8P 802536-08-9P
    802536-09-0P 802536-10-3P 802536-11-4P
    802536-12-5P 802536-13-6P 802536-14-7P
    802536-15-8P 802536-16-9P 802536-17-0P
    802536-18-1P 802536-19-2P 802536-20-5P
    802536-21-6P 802536-22-7P 802536-23-8P
    802536-24-9P 802536-25-0P 802536-26-1P
    802536-27-2P 802536-28-3P 802536-29-4P
    802536-30-7P 802536-31-8P 802536-32-9P
    802536-33-0P 802536-34-1P 802536-35-2P
    802536-36-3P 802536-37-4P 802536-38-5P
    802536-39-6P 802536-40-9P 802536-41-0P
    802536-42-1P 802536-43-2P 802536-44-3P
```

```
802536-45-4P 802536-46-5P 802536-47-6P
802536-48-7P 802536-49-8P 802536-50-1P
802536-51-2P 802536-52-3P 802536-53-4P
802536-54-5P 802536-55-6P 802536-56-7P
802536-57-8P 802536-58-9P 802536-59-0P
802536-60-3P 802536-61-4P 802536-62-5P
802536-63-6P 802536-64-7P 802536-65-8P
802536-66-9P 802536-67-0P 802536-68-1P
802536-69-2P 802536-70-5P 802536-71-6P
802536-72-7P 802536-73-8P 802536-74-9P
802536-75-0P 802536-76-1P 802536-77-2P
802536-78-3P 802536-79-4P 802536-80-7P
802536-81-8P 802536-82-9P 802536-83-0P
802536-84-1P 802536-85-2P 802536-86-3P
802536-87-4P 802536-88-5P 802536-89-6P
802536-90-9P 802536-91-0P 802536-92-1P
802536-93-2P 802536-94-3P 802536-95-4P
802536-96-5P 802536-97-6P 802536-98-7P
802536-99-8P 802537-00-4P 802537-01-5P
802537-02-6P 802537-03-7P 802537-04-8P
802537-05-9P 802537-06-0P 802537-07-1P
802537-08-2P 802537-09-3P 802537-10-6P
802537-11-7P 802537-12-8P 802537-14-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation)
; USES (Uses)
   (drug candidate; preparation of pyrazoloquinazolines as inhibitors of
   protein kinases such as Aurora2 for the treatment of proliferative
   disorders such as cancer, Alzheimer's disease, and autoimmune diseases)
802537-16-2P 802537-17-3P 802537-18-4P
802537-19-5P 802537-21-9P 802537-22-0P
802537-23-1P 802537-40-2P 802537-41-3P
802537-42-4P 802537-43-5P 802537-44-6P
802537-45-7P 802537-46-8P 802537-47-9P
802537-48-0P 802537-49-1P 802537-50-4P
802537-51-5P 802537-52-6P 802537-53-7P
802537-54-8P 802537-55-9P 802537-56-0P
802537-57-1P 802537-58-2P 802537-59-3P
802537-60-6P 802537-61-7P 802537-62-8P
802537-63-9P 802537-64-0P 802537-65-1P
802537-66-2P 802537-67-3P 802537-68-4P
802537-69-5P 802537-70-8P 802537-71-9P
802537-72-0P 802537-73-1P 802537-74-2P
802537-75-3P 802537-76-4P 802537-91-3P
802538-00-7P 802538-01-8P 802538-04-1P
802538-05-2P 802538-07-4P 802538-08-5P
802538-09-6P 802538-10-9P 802538-11-0P
802538-14-3P 802538-15-4P 802538-16-5P
802538-17-6P 802538-18-7P 802538-19-8P
802538-20-1P 802538-21-2P 802538-22-3P
802538-23-4P 802538-24-5P 802538-25-6P
802538-28-9P 802538-29-0P 802538-30-3P
802538-31-4P 802538-32-5P 802538-33-6P
802538-34-7P 802538-35-8P 802538-36-9P
802538-37-0P 802538-38-1P 802538-39-2P
802538-40-5P 802538-41-6P 802538-42-7P
802538-43-8P 802538-44-9P 802538-45-0P
802538-46-1P 802538-47-2P 802538-48-3P
802538-49-4P 802538-50-7P 802538-51-8P
802538-52-9P 802538-53-0P 802538-54-1P
```

IT

```
802538-55-2P 802538-56-3P 802538-57-4P
802538-58-5P 802538-59-6P 802538-60-9P
802538-61-0P 802538-62-1P 802538-63-2P
802538-64-3P 802538-65-4P 802538-66-5P
802538-67-6P 802538-68-7P 802538-69-8P
802538-70-1P 802538-71-2P 802538-72-3P
802538-73-4P 802538-74-5P 802538-75-6P
802538-76-7P 802538-77-8P 802538-78-9P
802538-80-3P 802538-81-4P 802538-82-5P
802538-83-6P 802538-84-7P 802538-85-8P
802538-86-9P 802538-87-0P 802538-88-1P
802538-89-2P 802538-90-5P 802538-91-6P
802538-92-7P 802538-93-8P 802538-94-9P
802538-95-0P 802538-96-1P 802538-97-2P
802538-98-3P 802538-99-4P 802539-00-0P
802539-01-1P 802539-02-2P 802539-03-3P
802539-04-4P 802539-05-5P 802539-06-6P
802539-07-7P 802539-08-8P 802539-09-9P
802539-10-2P 802539-11-3P 802539-12-4P
802539-13-5P 802539-14-6P 802539-15-7P
802539-16-8P 802539-17-9P 802539-18-0P
802539-19-1P 802539-20-4P 802539-21-5P
802539-22-6P 802539-23-7P 802539-24-8P
802539-25-9P 802539-26-0P 802539-27-1P
802539-28-2P 802539-29-3P 802539-30-6P
802539-31-7P 802539-32-8P 802539-33-9P
802539-34-0P 802539-35-1P 802539-36-2P
802539-37-3P 802539-38-4P 802539-39-5P
802539-40-8P 802539-41-9P 802539-42-0P
802539-43-1P 802539-46-4P 802539-47-5P
802539-49-7P 802539-50-0P 802539-51-1P
802539-52-2P 802539-54-4P 802539-55-5P
802539-56-6P 802539-57-7P 802539-58-8P
802539-59-9P 802539-60-2P 802539-61-3P
802539-62-4P 802539-64-6P 802539-66-8P
802539-67-9P 802539-68-0P 802539-69-1P
802539-71-5P 802539-72-6P 802539-73-7P
802539-75-9P 802539-76-0P 802539-77-1P
802539-78-2P 802539-79-3P 802539-80-6P
802539-82-8P 802539-83-9P 802539-84-0P
802539-85-1P 802539-86-2P 802539-87-3P
802539-88-4P 802539-89-5P 802539-90-8P
802539-91-9P 802539-92-0P 802539-93-1P
802539-94-2P 802539-95-3P 802539-96-4P
802539-97-5P 802539-98-6P 802539-99-7P
802540-00-7P 802540-01-8P 802540-02-9P
802540-03-0P 802540-04-1P 802540-05-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation)
; USES (Uses)
   (drug candidate; preparation of pyrazoloquinazolines as inhibitors of
   protein kinases such as Aurora2 for the treatment of proliferative
   disorders such as cancer, Alzheimer's disease, and autoimmune diseases)
802540-06-3P 802540-07-4P 802540-08-5P
802540-09-6P 802540-10-9P 802540-11-0P
802540-12-1P 802540-13-2P 802540-14-3P
802540-15-4P 802540-16-5P 802540-17-6P
802540-18-7P 802540-19-8P 802540-20-1P
802540-21-2P 802540-22-3P 802540-23-4P
802540-24-5P 802540-25-6P 802540-26-7P
```

TΤ

```
802540-27-8P 802540-28-9P 802540-29-0P
     802540-30-3P 802540-31-4P 802540-32-5P
     802540-33-6P 802540-34-7P 802540-35-8P
     802540-36-9P 802540-37-0P 802540-38-1P
     802540-39-2P 802540-40-5P 802540-41-6P
     802540-47-2P 802540-48-3P 802540-49-4P
    802540-50-7P 802540-51-8P 802540-52-9P
     802540-53-0P 802540-54-1P 802540-55-2P
     802540-56-3P 802540-57-4P 802540-58-5P
     802540-59-6P 802540-60-9P 802540-61-0P
     802540-62-1P 802540-63-2P 802540-64-3P
     802540-65-4P 802540-66-5P 802540-67-6P
     802540-68-7P 802540-69-8P 802540-70-1P
     802540-71-2P 802540-72-3P 802540-73-4P
     802540-74-5P 802540-75-6P 802540-76-7P
     802540-77-8P 802540-78-9P 802540-79-0P
     802540-80-3P 802540-81-4P 802540-82-5P
     802540-83-6P 802540-84-7P 802540-85-8P
     802540-86-9P 802540-87-0P 802540-88-1P
     802540-89-2P 802540-90-5P 802540-91-6P
     802540-92-7P 802540-93-8P 802540-94-9P
     802540-95-0P 802540-96-1P 802540-97-2P
     802540-98-3P 802540-99-4P 802541-00-0P
     802541-01-1P 802541-02-2P 802541-03-3P
     802541-04-4P 802541-05-5P 802541-06-6P
     802541-07-7P 802541-08-8P 802541-09-9P
     802541-10-2P 802541-11-3P 802541-93-1P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
    THU (Therapeutic use); BIOL (Biological study); PREP (Preparation)
     ; USES (Uses)
        (drug candidate; preparation of pyrazoloquinazolines as inhibitors of
        protein kinases such as Aurora2 for the treatment of proliferative
        disorders such as cancer, Alzheimer's disease, and autoimmune diseases)
IT
     802541-68-0P 802541-69-1P 802541-70-4P
     802541-71-5P 802541-85-1P 802541-86-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (intermediate; preparation of pyrazoloquinazolines as inhibitors of protein
        kinases such as Aurora2 for the treatment of proliferative disorders
        such as cancer, Alzheimer's disease, and autoimmune diseases)
IT
     7440-05-3, Palladium, uses
     RL: CAT (Catalyst use); USES (Uses)
        (processes for the preparation of pyrazoloquinazoline protein kinase
        inhibitors)
     534-17-8, Cesium carbonate 1336-21-6, Ammonium hydroxide
     1907-33-1 4039-32-1, Lithium bis(trimethylsilyl)amide
     RL: RGT (Reagent); RACT (Reactant or reagent)
        (processes for the preparation of pyrazoloquinazoline protein kinase
        inhibitors)
TT
     802534-91-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
     PREP (Preparation); THU (Therapeutic use); PREP
     (Preparation); PREP (Preparation); RACT (Reactant or
     reagent); USES (Uses)
        (drug candidate; preparation of pyrazoloquinazolines as inhibitors of
        protein kinases such as Aurora2 for the treatment of proliferative
        disorders such as cancer, Alzheimer's disease, and autoimmune diseases)
RN
     802534-91-4
                 HCAPLUS
CN
     1H-Pyrazolo[4,3-h]quinazoline-3-carboxylic acid, 4,5-dihydro-1,4,4-
     trimethyl-8-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-, ethyl ester (9CI)
```

IT

(CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RETABLE

Referenced Author (RAU)	Year VC (RPY) (RV	L) (RPG)	Referenced Work (RWK)	Referenced File
Clare, M	2003		WO 03070706 A	HCAPLUS
Goldberg, D	12002	1	US 2002119975 A1	HCAPLUS
Masferrer, J	2004	1	WO 2004014352 A	HCAPLUS

=> d 182 bib abs hitstr retable 2-5

L82 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:696351 HCAPLUS

DN 141:225319

TI Process for preparation of N-heteroaryl-N-aryl-amines

IN Snoonian, John R.; Oliver-Shaffer, Patrica-Ann

PA Vertex Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

LA English

```
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     ------
                         ----
                                -----
                                            _____
                                                                   -----
PΙ
     WO 2004072038
                                20040826
                         Α1
                                            WO 2004-US3933
                                                                   20040210 <--
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2004212494
                          A1
                                20040826
                                            AU 2004-212494
                                                                   20040210 <--
     CA 2515669
                          AA
                                20040826
                                            CA 2004-2515669
                                                                   20040210 <--
     US 2004230058
                          Α1
                                20041118
                                            US 2004-775687
                                                                   20040210 <--
     EP 1603878
                          A1
                                20051214
                                            EP 2004-709916
                                                                   20040210 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1761653
                          Α
                                20060419
                                            CN 2004-80007137
                                                                   20040210 <--
     NO 2005004201
                          Α
                                20051006
                                            NO 2005-4201
                                                                   20050909 <--
PRAI US 2003-446641P
                          P
                                20030210
                                          <--
     US 2003-474272P
                          Ρ
                                20030528
                                          <--
     WO 2004-US3933
                          Α
                                20040210
os
     CASREACT 141:225319; MARPAT 141:225319
GI
```

The present invention relates to a process for producing diarylamine derivs. with general formula of Ar1-NH-Ar2 [wherein Ar1 and Ar2 = independently (un)substituted aryl or heteroaryl] or salts thereof, which comprises coupling a compound of formula Ar1-X [where X = a leaving group] with an amine of formula Ar2-NH-Y [where Y = CO2Z; Z = alkyl, PhCH2, Fmoc, etc.] in the presence of an alkali metal salt or a transition metal catalyst. For example, the compound I was prepared starting from 6-chloro-2-(4-fluorophenyl)nicotinic acid Me ester (preparation given) and N-(tert-butoxycarbonyl)-2,6-difluoroaniline.

Ι

IT 745833-08-3P 745833-21-0P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of N-heteroaryl-N-aryl-amines)

RN 745833-08-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-[(2,6-difluorophenyl)amino]-2-(4-fluorophenyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 745833-21-0 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(2,4-difluorophenyl)-6-[(2,6-difluorophenyl)amino]- (9CI) (CA INDEX NAME)

Pd

TT 745833-15-2P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of N-heteroaryl-N-aryl-amines)

RN 745833-15-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-(2,4-difluorophenyl)-6-[(2,6-difluorophenyl)amino]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

ΙT 1336-21-6, Ammonium hydroxide 745833-17-4 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of N-heteroaryl-N-aryl-amines) RN 1336-21-6 HCAPLUS CN

Ammonium hydroxide ((NH4)(OH)) (9CI) (CA INDEX NAME)

 H_4N-OH

RN 745833-17-4 HCAPLUS CN Carbamic acid, (2,6-difluorophenyl)-, 1,1-dimethylethyl ester (9CI) INDEX NAME)

IT 497-19-8, Sodium carbonate, reactions 534-17-8, Cesium carbonate 584-08-7, Potassium carbonate 865-47-4 **865-48-5 1310-73-2**, Sodium hydroxide, reactions **7440-09-7D**, Potassium, salts **7440-17-7D**, Rubidium, salts 7440-46-2D, Cesium, salts 7778-53-2, Potassium phosphate RL: RGT (Reagent); RACT (Reactant or reagent) (preparation of N-heteroaryl-N-aryl-amines) RN 497-19-8 HCAPLUS CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)

●2 Na

RN 534-17-8 HCAPLUS CN Carbonic acid, dicesium salt (8CI, 9CI) (CA INDEX NAME)

●2 Cs

RN 584-08-7 HCAPLUS CN Carbonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)

●2 K

RN 865-47-4 HCAPLUS CN 2-Propanol, 2-methyl-, potassium salt (9CI) (CA INDEX NAME)

K

RN 865-48-5 HCAPLUS CN 2-Propanol, 2-methyl-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 1310-73-2 HCAPLUS CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-OH

RN 7440-09-7 HCAPLUS CN Potassium (8CI, 9CI) (CA INDEX NAME)

K

RN 7440-17-7 HCAPLUS CN Rubidium (8CI, 9CI) (CA INDEX NAME)

Rb

RN 7440-46-2 HCAPLUS CN Cesium (8CI, 9CI) (CA INDEX NAME)

Cs

RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)

●3 K

L82 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:98255 HCAPLUS

DN 138:287627

TI Suzuki Cross-Coupling of Solid-Supported Chloropyrimidines with

Arylboronic Acids

AU Wade, Janice V.; Krueger, Clinton A.

Ι

CS ChemRx Division, Discovery Partners International Inc., South San Francisco, CA, 94080, USA

SO Journal of Combinatorial Chemistry (2003), 5(3), 267-272 CODEN: JCCHFF; ISSN: 1520-4766

PB American Chemical Society

DT Journal

LA English

OS CASREACT 138:287627

GΙ

The utility of the Suzuki cross-coupling to synthesize biaryl compds. is expanded herein to include reactions of resin-supported chloropyrimidines with boronic acids. In particular, an efficient method is described for the synthesis of a library of biaryl compds. from solid-supported chloropyrimidines. The Suzuki reaction was performed in an inert atmospheric using Pd2 (dba) 3/P(t-Bu) 3 as catalyst, spray-dried KF as base, and THF as solvent. The reaction was allowed to proceed overnight at 50 °C. Upon cleavage with acid, a library of 4-(substituted amino)-6-arylpyrimidines, e.g. I, was obtained in moderate yield and high purity.

To 30610-74-ODP, resin-supported 503610-79-5DP, resin-supported

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(Suzuki cross-coupling of solid-supported chloropyrimidines with arylboronic acids)

RN 503610-74-0 HCAPLUS

CN 4-Pyrimidinamine, 6-chloro-N-(2,3-dihydro-1H-inden-5-yl)-2-(methylthio)-(9CI) (CA INDEX NAME)

RN 503610-79-5 HCAPLUS

CN 4-Pyrimidinamine, N-(2,3-dihydro-1H-inden-5-yl)-6-(4-methoxyphenyl)-2-(methylthio)- (9CI) (CA INDEX NAME)

IT 7778-53-2, Tripotassium phosphate

RL: RGT (Reagent); RACT (Reactant or reagent)
(Suzuki cross-coupling of solid-supported chloropyrimidines with

arylboronic acids) RN 7778-53-2 HCAPLUS

CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)

●3 K

IT 503610-79-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (Suzuki cross-coupling of solid-supported chloropyrimidines with arylboronic acids)

RN 503610-79-5 HCAPLUS

CN 4-Pyrimidinamine, N-(2,3-dihydro-1H-inden-5-yl)-6-(4-methoxyphenyl)-2-(methylthio)- (9CI) (CA INDEX NAME)

IT 497-19-8, Sodium carbonate, reactions

RL: RGT (Reagent); RACT (Reactant or reagent)
(failed reagent in the Suzuki cross-coupling of solid-supported chloropyrimidines with arylboronic acids)

RN 497-19-8 HCAPLUS

CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)

●2 Na

RETABLE

GI

	(RPY)	(RVL)		(RWK)	Referenced File				
	+===== 1990		+===== 3730		+======== HCAPLUS				
Boojamra, C	1997	62	1240	•	HCAPLUS				
	2001				HCAPLUS				
Breitenbucher, J	1998	139	1295	Tetrahedron Lett	HCAPLUS				
	1999		361		HCAPLUS				
	12002				HCAPLUS				
Ding, S	2001	42			HCAPLUS				
	12000	•		Abstr Pap Am Chem So					
	12000				HCAPLUS				
	1994				HCAPLUS				
	1986			Chem Scr	HCAPLUS				
	12002			Chem Rev	HCAPLUS				
Jin, J	2001		•	J Comb Chem	HCAPLUS				
Johnson, C	1998		•		HCAPLUS				
	1998			Angew Chem, Int Ed E					
	2000			J Am Chem Soc	HCAPLUS				
	1998		187	Adv Met Org Chem	HCAPLUS				
	2001		13820	J Org Chem Org Lett	HCAPLUS				
	2001		1803	Org Lett	HCAPLUS				
	2001		1	Abstr Pap Am Chem So					
	11999		19550	J Am Chem Soc	HCAPLUS				
	1999		3804	J Org Chem	HCAPLUS				
	1999		13804	J Org Chem	HCAPLUS				
Zhang, T	1999	40			HCAPLUS				
L82 ANSWER 4 OF 5 HCA		COPYRI	GHT 200	6 ACS on STN					
AN 1993:625947 HCAPL	US								
DN 119:225947									
TI Method of synthesi	s of 1	-(2',4	',6'-tr	ichlorophenyl)-3-[[2'	'-chloro-5''-				
(octadecylsuccinim	ido)ph	enyl]ar	mino]-4	-(1'''-naphthylazo)py:	razol-5-one by				
diazo coupling with	h α-nag	ohthyla	amine						
IN Stepanov, Petr A.;	Yurche	enko, (Galina .	A.; Khlypenko, Lyubov	N.; Stepanova,				
Galina S.; Zhurin,									
	himiko-	-fotogi	rafiche	skoj promyshlennosti,	USSR				
SO U.S.S.R.									
From: Izobreteniya CODEN: URXXAF	1992,	(19),	104.						
DT Patent									
LA Russian									
FAN.CNT 1									
PATENT NO.	KIND	DATI	7	ADDITONTON NO	לאשר				
FAIENI NO.	VIND	DATI	· 	APPLICATION NO.	DATE				
PI SU 1735296	A1	1993	20523	SU 1990-4821968	19900219 <				
PRAI SU 1990-4821968	***			<	19900213 <				
CT		100							

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title compound (I) is prepared by reaction of α -naphthylamine with NaNO2 in presence of concentrated HCl at 0 to -2°; the resultant α -naphthyldiazonium chloride is then coupled with pyrazole derivative II in alc. medium in presence of pyridine at 0-35°, in mass ratio α -naphthylamine:II:pyridine = 0.25:1:(1.07-1.60). 2-Propanol is used as solvent. The process is conducted at 15-25°.
- RN 7632-00-0 HCAPLUS
 CN Nitrous acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

O == N - OH

Na

IT 70207-91-9P

RN 70207-91-9 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[4-chloro-3-[[4,5-dihydro-4-(1-naphthalenylazo)-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]amino]phenyl]-3-octadecyl-(9CI) (CA INDEX NAME)

L82 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1982:423561 HCAPLUS

DN 97:23561

- TI Synthesis of benzofuran-2-one derivatives by copper(I)-promoted coupling reactions of o-bromophenol with active methylene compounds
- AU Setsune, Junichiro; Matsukawa, Kimihiro; Kitao, Teijiro
- CS Dep. Appl. Chem., Univ. Osaka Prefect., Osaka, 591, Japan
- SO Tetrahedron Letters (1982), 23(6), 663-6 CODEN: TELEAY; ISSN: 0040-4039
- DT Journal
- LA English
- OS CASREACT 97:23561
- AB o-BrC6H4ONa with NaCHRCO2Et (R = CO2Et, COMe, CN) in the presence of CuBr in dioxane at 70 or 80° under N2 for 5 h gave 93% 3-ethoxycarbonylbenzofuran-2-one, 15% 2-hydroxy-3-acetylbenzofuran, and 34% 2-o-hydroxyanilino-3-ethoxycarbonylbenzofuran, resp.
- IT 996-82-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling reaction of, with sodium bromophenoxide, benzofuran derivative by cuprous bromide-catalyzed)

- RN 996-82-7 HCAPLUS
- CN Propanedioic acid, diethyl ester, ion(1-), sodium (9CI) (CA INDEX NAME)

• Na+

IT 82131-02-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by cuprous bromide-catalyzed coupling reaction of bromophenoxide with active methylene compound)

- RN 82131-02-0 HCAPLUS
- CN 3-Benzofurancarboxylic acid, 2-[(2-hydroxyphenyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)